The Bay Institute
Natural Resources Defense Council

By fax, email, and surface mail

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RE: SOUTH DELTA IMPROVEMENTS PROJECT SCOPING COMMENTS

Gentlemen:

This letter is submitted as the comments of the Bay Institute and the Natural Resources Defense Council regarding preparation of the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for implementing the South Delta Improvement Project (SDIP). Our organizations are extremely concerned that the SDIP has the potential to significantly harm the Bay-Delta ecosystem, including listed endangered fish species. Specifically, we are concerned that the project may not meet the CALFED Record of Decision (ROD) that any increase in Delta pumping limits result in "continuous improvements in water quality and complement ecosystem restoration" and that such an increase is contingent upon "avoiding adverse impacts to fishery protection" (ROD, p. 48-49). Any alternative that does not meet this requirement must be rejected.

We recommend that CALFED and the lead agencies do the following in the draft EIS/R:

(1) Specifically evaluate alternatives with operational rules that preclude harm to endangered species and the Bay-Delta ecosystem.
(2) Consider alternatives to use of the current or an expanded Environmental Water Account to mitigate fishery impacts of the project.
(3) Quantitatively compare potential fishery impacts of the project to historical levels of incidental take.
(4) Fully evaluate upstream impacts of project operations.
(5) Fully evaluate downstream impacts of project operations.

(6) Condition project permits on full implementation of baseline CALFED protections.
(7) Fully evaluate alternative south-of-Delta water management options for achieving project purposes.
(8) Evaluate the potential to achieve unmet environmental needs.
(9) Fully evaluate potential energy impacts.
(10) Fully evaluate potential water quality impacts.
(11) Fully evaluate the adequacy of existing fish screens and salvage procedures.
(12) Fully evaluate cumulative impacts from other CALFED water supply projects.
(13) Fully evaluate potential assurances to ensure that environmental commitments are met.

1. Use of The Project's Expanded Export Capacity Is a Privilege, Not a Right: Use of the public's water resources, management of public trust biological resources, and access to and use of public facilities is subject to compliance with all federal and state regulatory and statutory requirements for environmental and water quality protection and with the state's public trust responsibilities. Because unconstrained use of the project would cause extreme adverse impacts to fish species and because use of the Environmental Water Account (EWA) as mitigation for these impacts is highly problematic (see below), the EIS/R should evaluate alternatives which are based on operational rules that preclude use of the project when the potential for fishery and other environmental impacts is high and allow for agency discretion in using project capacity to shift export operations to windows of opportunity that represent low periods of risk to aquatic resources. These alternatives should assume no net decrease in Delta outflow as a result of the project, by balancing use of increased export capacity against commensurate reductions in export pumping at other times and/or against commensurate decreases in withdrawals and diversions upstream of the Delta. See attachment A for a draft discussion document of potential operational rules for a fish-friendly alternative.

2. Use of the EWA As Project Mitigation Is Problematic: Based on our evaluation of the 8500 Stakeholder process and ROD implementation, we believe that CALFED and the lead agencies are likely to want to rely on use of the EWA to fully mitigate for the direct impacts of increased water export operations on listed endangered fish species and fish species of concern in the Delta. This approach is unrealistic and risky for a number of reasons.

- The EWA is an experimental approach to protect fishes from direct and indirect impacts of Delta water export operations. After only two years of operations at current water export levels, serious structural and operational flaws in the EWA have been identified by the implementing agencies (i.e., U.S. Fish and Wildlife Service, NOAA Fisheries, California Department of Fish and Game, U. S. Bureau of Reclamation, and California Department of Water Resources) as well as CALFED stakeholders (including The Bay Institute in its *Second Annual State of the Environmental Water Account Report*) and an independent science panel convened by CALFED to review its operations and effectiveness.

- Chief among the EWA's flaws is its consistent inability to acquire the amounts of water that extensive modeling and gaming exercises predicted would be required to reliably address fishery needs, even at the current level of export operations. This suggests that the expectation that an enlarged EWA will be available or sufficient to address the increased direct impacts resulting from increased export operations is unjustified. Further, while some scenarios for increased export operations protocols considered by CALFED and the lead agencies in the 8500 Stakeholders process appropriately included greater access of the EWA to water project facilities (e.g., storage) and operational capacity (e.g., export capacity), these features cannot address uncertainties regarding EWA access to water markets and its ability to reliably purchase the larger amounts of water that would be required to provide equivalent levels of protection in the face of expanded exports and increased fishery impacts. In addition, experience in the past two years indicates that access to "variable assets" such as a portion of export capacity is also not reliable.

- The EWA has been managed almost exclusively as a tool to avoid jeopardy to listed species. The EWA has not fulfilled the ROD requirement that this tool be managed to meet "restoration / recovery needs as part of the overall ERP" (ROD, p. 54).

- All modeling and gaming exercises conducted to date indicate that, using the EWA approach for in-Delta fish protection, the amounts of water required to adequately protect endangered fishes from direct impacts of export operations is highly variable from year to year – predicted inter-annual costs for the EWA under current operational levels varies by a factor of two. Increases in the magnitude of water project operations, by increasing EWA costs for specific fish protection actions, will exacerbate this volatility. In fact, 8500 cfs operations protocols considered by CALFED and the lead agencies in

> the 8500 Stakeholder process draft Discussion Document would require the EWA to cover both current costs and the incremental costs of 8500 cfs operations, increasing the likelihood that the EWA will periodically incur extremely high costs early in the water year, potentially bankrupting the account and preventing it from providing adequate fish protection for endangered species vulnerable to water project impacts later in the year.

Using the EWA to provide the additional levels of protection required to satisfy the ROD commitment of no additional fishery impacts resulting from increased export operations would likely be unable to provide either compensatory water deliveries or adequate fishery or endangered species protection and recovery. The EIS/EIR should include a comprehensive risk analysis of an EWA mitigation approach to determine the likely frequency and severity of adverse fishery and ecosystem impacts for each alternative relying on such an approach. Furthermore, alternatives that do not rely on the EWA to mitigate impacts but use options such as more protective operational rules should also be evaluated.

3. Unconstrained Use Of The Project Will Jeopardize Listed Endangered Species And Other Species Of Concern: Analyses of potential fish take (conducted by Jones and Stokes for CALFED and DWR as part of the 8500 Stakeholder process) strongly indicate that, even after application of expanded EWA protections, take of most ESA-listed species is higher under the 8500 cfs scenario than the 6680 cfs scenario. The EIS/EIR should quantitatively evaluate all alternatives in order to accurately compare all direct and indirect fishery impacts of proposed increased export operations with current conditions. Alternatives that result in increased fishery impacts should be modified to comply with CALFED's criterion for no additional impacts and to meet the CALFED objective of promoting the protection and recovery of endangered fish species. Any alternatives that do not meet these criteria should be rejected.

4. Upstream Impacts Must Be Fully Evaluated: Use of increased Delta conveyance capacity and increased levels of Delta export will result in increased alteration in the amount of timing of flow regimes in Sacramento Basin rivers, and therefore is likely to conflict with CALFED objectives for ecosystem restoration and other program areas. The potential reliance on use of the EWA (which includes large-scale water purchases in the Sacramento Basins, primarily intended for export to south of Delta users or storage) to mitigate fishery impacts of the project will further exacerbate upstream flow conditions. In addition, by including CVP use of the increased SWP export capacity through Joint Point of Diversion, the SDIP potentially impacts the ecosystem and fishery resources of the Trinity River, from which the CVP diverts large amounts of water. The EIS/EIR should fully evaluate the potential

geomorphological (e.g., bed mobilization flows), water quality (e.g., water temperature), ecological (e.g., riparian habitat establishment and maintenance), and fishery impacts on these upstream ecosystems and their aquatic resources of increased through-Delta conveyance and export.

5. Downstream Impacts Must Be Fully Evaluated: Use of increased Delta conveyance capacity and increased levels of Delta export will result in reduced freshwater outflow to San Francisco Bay (including Suisun and San Pablo Bays) and upstream movement of the X2 position. The timing and amounts of freshwater flow to the Bay are strongly correlated with population abundance of numerous fish and invertebrate species, and reduced spring flows are associated with depressed populations and restricted distributions of these species. Furthermore, changes in the timing and amount of Delta outflow affect salinity and habitat conditions in the tidal and managed wetlands of Suisun Bay. CALFED's and DWR's preliminary impact analyses for the 8500 Stakeholder process found that each of the alternative operations proposals evaluated resulted in reduced Delta outflow and upstream movement of X2. The EIS / EIR should fully evaluate the ecological (e.g., wetland growth season; aquatic food web) and fishery impacts on these downstream ecosystems, on X2 location, and on the abundance and distribution of aquatic resources, of increased through-Delta conveyance and export.

6. Baseline ROD Protections and Conditions Are a Necessary Precondition to Permitting the Project: The CALFED ROD assumed that baseline protections would be in place as a prerequisite to issuing permits for existing or future water supply project operations and for use of the EWA. These baseline protections included both Tier 1 (regulatory baseline) components, including full implementation of the Central Valley Project Improvement Act, Tier 2 (CALFED) components, including full implementation of the EWA and the Ecosystem Restoration Program (ERP), and Tier 3 (endangered species safety net) components. Recent legal and administrative decisions have significantly reduced the amount of protection for the Bay-Delta ecosystem in the baseline from implementation of the CVPIA and Trinity River protections. Furthermore, the EWA has not received the full amount of assets and funding identified in the ROD (which were sized to offset fishery impacts of existing export capacity), and adequate, reliable long-term funding for the ERP beyond FY 2003 has not been secured. In addition, the funding and implementation protocols for use of Tier 3 are insufficient to ensure endangered species protection and recovery. Finally, measures to implement the ERP may not be used as mitigation for new projects, according to the ROD. For all these reasons, full implementation of Tiers 1, 2 and 3 must be assumed before the project can be permitted, and mitigation for the project may not include components of Tiers 1, 2 and 3.

7. South of Delta Water Management Alternatives to the Project Must Be Fully Evaluated: Environmentally benign and cost-effective alternatives for meeting water supply demands south of the Delta, such as water conservation and recycling, retirement of drainage-impacted lands and south of Delta water transfers, are available and should be evaluated in the EIS/R. Such alternative should include a full range of water management alternatives in the San Joaquin Valley as well as urban areas in Southern California and the Bay Area.

8. Energy Impacts Must Be Fully Analyzed: Pumping water to South of Delta water users, particularly urban water users, requires significant amounts of energy. Given recent experience of California's energy markets, it is essential that the EIR/EIS fully analyze the energy impacts of increasing Delta pumping, and the comparative impacts of the range of the alternative water management strategies discussed above. This evaluation should include a full analysis of air quality and related impacts from these alternatives.

9. Alternatives to Meet Environmental Needs Must Be Considered: The EIS/R should consider how alternatives to use increased export capacity could also be used to meet unmet environmental needs, such as level 4 refuge supplies and San Joaquin River restoration. Our organizations may or may not oppose such an alternative. However, we believe that such an evaluation is required for the document to include a full range of alternatives.

10. Drinking (and Other)Water Quality Impacts Must Be Fully Analyzed: Additional pumping and changes in the timing of pumping could result in degraded water quality. The document must fully evaluate these potential impacts. Further, some stakeholders have suggested that additional surface storage is required to mitigate the impacts of additional pumping on Delta water quality. The EIS/EIR should discuss the need for water quality mitigation, the cumulative impacts of alternatives to provide such mitigation and the willingness of project beneficiaries to pay mitigation costs.

11. The Adequacy of Existing Fish Screens and Salvage Operations Must Be Analyzed: The document must analyze the adequacy of existing fish screens and salvage operations to reduce fishery impacts. This evaluation should discuss the need to upgrade these facilities. This discussion should also include an analysis of related impacts such as predation.

12. Cumulative Impacts Must Be Fully Evaluated: The EIS/R should evaluate the potential impacts of the project in conjunction with CALFED's other proposed

changes in water management infrastructure, including expanded Los Vaqueros Reservoir, expanded Shasta Reservoir, and an in-Delta storage facility.

13. Environmental Assurances Must Be Fully Analyzed: In the past several years, commitments regarding the Trinity River, the CVPIA, the EWA and other CALFED related actions have not been honored. In some cases, CALFED agencies have delayed or even proposed abandoning commitments regarding environmental protection and restoration. The document must include a full discussion of potential impacts should commitments regarding use of additional Delta export capacity be violated. It should also include a full evaluation of alternative mechanisms to assure compliance, such as the revocation of any increase in Delta pumping limits should environmental commitments, for any reason, fail to materialize.

We look forward to working with you to ensure that these issues are thoroughly evaluated in the EIS/R. Please contact us if you have any questions regarding these comments.

Sincerely,

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Program Director
The Bay Institute

Barry Nelson
Senior Policy Analyst
Natural Resources Defense Council

ATTACHMENT A

Draft Discussion Document of Potential Operational Rules For Use of Expanded State Water Project Export Capacity

These draft operational rules for use of expanded State Water Project (SWP) export capacity are designed to:

- minimize the impacts of increased export operations on Delta fishery resources during ecologically sensitive periods;
- incorporate use of the Environmental Water Account (EWA) for needed fish protection while minimizing the tendency for increased export capacity to exacerbate large year-to-year variability in EWA costs; and

- equitably share the benefits of increased SWP capacity among the SWP, Central Valley Project (CVP) and the EWA (and/or other environmental benefits such as refuge Level 4 supplies and San Joaquin River restoration replacement supplies).

The proposed operational rules are contingent on a fully funded and functional EWA, including EWA access to "non-spillable" storage south of the Delta and a share of the SWP export and conveyance capacity as described below. These alternatives should assume no net decrease in Delta outflow as a result of the project, by balancing use of increased export capacity against commensurate reductions in export pumping at other times and/or against commensurate decreases in withdrawals and diversions upstream of the Delta.

1. November 1 – January 31

During the late fall and early winter, until the onset of spring-run and winter-run outmigration and/or the delta smelt spawning migration, fish protection needs (in terms of export curtailments) are generally low. Also during this period, the EWA is typically used to enhance upstream flows, often in conjunction with transfer of EWA water stored north of the Delta to SOD storage. Therefore, opportunities for increased export of project water coincide with the EWA's need for access to SWP export capacity and, occasionally, endangered species protection at the pumps. For this period, the following operational rules could apply:

- Use of expanded capacity (i.e., SWP export pumping >6680 cfs) prohibited without express concurrence of fishery managers (U.S. Fish and Wildlife Service, USFWS, NOAA Fisheries, and California Department of Fish and Game, CDFG).
- Use of expanded capacity in January subject to limits on movement of X2 location. No debt accrued by EWA for complying with this restriction.
- If use of expanded capacity is permitted but subsequently curtailed for fishery protection purposes during this period, no debt is owed to projects or accrued by the EWA for curtailment of SWP export rates between 8500 and 6680 cfs. The EWA will be used to compensate for reductions in deliveries resulting from export rates curtailed below 6680 cfs.
- The EWA has first access to expanded capacity, in the amount needed to transfer EWA water across the Delta, until EWA share of south-of-Delta (SOD) storage is full. Expanded export capacity above EWA needs is shared by the SWP and CVP as determined by their cooperative agreements.

2. February 1 – July 15

Late winter through early summer is an ecologically sensitive period for most priority and endangered fish species, as well as the Delta ecosystem. Delta outflow, the location

of X2, and export rates (as a proportion of Delta inflow) are presently restricted during these months. Use of the EWA to provide necessary (and likely frequent) fish protection in the face of increased allowable export rates would greatly increase EWA costs and contribute to the already large year-to-year variability in EWA costs. Use of expanded export capacity during this period would be environmentally harmful and have disproportionately large adverse impacts on the ecosystem and/or the EWA. Therefore, the following operational rule is proposed:

- No use of expanded capacity under any circumstances. Start date for this period may be deferred to later in February with concurrence of fishery agencies, but must end if chinook salmon are detected in lower Sacramento River or Delta and/or delta smelt are detected in the south Delta in numbers exceeding threshold limits established by the fishery agencies.

3. July 16 – October 31

Fish protection needs (in terms of export curtailments) are typically low during the summer/early fall period. The following operational rules are proposed:

- Use of expanded capacity permitted.
- Use of expanded capacity in July is subject to limitations on movement of X2 location. No cost is accrued by EWA for complying with this restriction.
- If use of expanded capacity is curtailed for fishery protection purposes other than the X2/Delta outflow restrictions, any reductions in deliveries are compensated for by the EWA.
- The EWA has first access to expanded capacity when EWA water is being transferred across the Delta to offset previous impacts accrued by fishery protection impacts on the CVP or SWP operations. When EWA impacts fully offset, the EWA and SWP and the CVP projects split new supply equally until the EWA share of SOD is full. When EWA SOD storage is full, use of expanded capacity is shared by the SWP and CVP as determined by their cooperative agreements.